

CLAIMS

1. A bottom seal (9) at the lower end of a step screen (1) provided with a grating (3) and adapted to convey solid particles and objects positioned in flowing water (2), the grating comprising alternately fixed and movable lamellar rods (4, 5) with intermediate gaps (6) to allow the water to pass through the grating and with steps (8) at their longitudinal edges (7) upstream, the movable lamellar rods (5) being movable in a closed motion path (2) in their plane with an upwards component (C) which is greater than the height of the steps (D), for step by step conveyance of the solid particles and the objects from the water and along the fixed lamellar rods (4) to an outlet, the bottom seal (9) extending substantially across the entire width of the grating to seal the ducts (10) that arise between the fixed lamellar rods at their lowermost step (8) as the movable lamellar rods move upwards between the fixed lamellar rods,

characterised in that

the bottom seal (9) comprises at least one elongate bottom cover (11), which at its longitudinal edge (12) upstream is connected to the step screen (1) and at its longitudinal edge (16) downstream on the one hand is guided on guides (17) on the lowermost steps (8) of the movable lamellar rods (5) in order to follow the motion thereof and, on the other hand, in this motion is pivotable up and down (E) close to and past the edges (7) upstream on the lowermost steps (8) of the fixed lamellar rods (4).

2. A bottom seal as claimed in claim 1, in which the bottom cover (11) to be pivotal is at least partly made of a flexible material.
- 35 3. A bottom seal as claimed in claim 1, in which the bottom cover (11) is pivotally connected to the step screen (1) via a bottom step (13), which

extends substantially across the entire width of the grating (3) upstream of the bottom cover.

4. A bottom seal as claimed in claim 3,
in which the bottom cover (11) is pivotally connected to the bottom step (13) by means of at least one hinge (15).

5. A bottom seal as claimed in any one of the preceding claims,

10 in which the guides (17) on the lowermost steps (8) of the movable lamellar rods (5) project from the same upstream towards the bottom cover (11) and guide the bottom cover from below.

15 6. A bottom seal as claimed in claim 5,
in which the longitudinal edge (16) of the bottom cover (11) downstream abuts slidingly against the guides (17) of the movable lamellar rods (5).

7. A bottom seal as claimed in claim 5 or 6,
in which the guides (17) of the movable lamellar rods (5) are substantially rectilinear.

20 8. A bottom seal as claimed in any one of the preceding claims,

25 in which the edges (7) upstream on the lowermost steps (8) of the fixed lamellar rods (4) are curved with a radius (F) which is only slightly greater than the pivoting radius (G) of the bottom cover (11) and which has substantially the same centre (7) as the latter to form a small, but substantially tight motion gap (20) between the edges of the fixed lamellar rods upstream and the longitudinal edge (16) of the bottom cover downstream.

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9. A bottom seal as claimed in any one of the preceding claims,

35 in which the bottom cover (11) to ensure its guiding on the guides (17) of the movable lamellar rods (5) during the motion thereof is yieldably loaded towards the guides.

10. A bottom seal as claimed in claim 9,
in which the yieldable load is provided by at least
one spring means, preferably at least one tension spring
(19) fixed between the bottom step (13) and the bottom
5 cover (11).